Title (en)

SYSTEM AND METHOD CONFIGURED FOR ANALYSING ACOUSTIC PARAMETERS OF SPEECH TO DETECT, DIAGNOSE, PREDICT AND/OR MONITOR PROGRESSION OF A CONDITION, DISORDER OR DISEASE

Title (de)

SYSTEM UND VERFAHREN ZUR ANALYSE VON AKUSTISCHEN PARAMETERN VON SPRACHE ZUR DETEKTION, DIAGNOSE, VORHERSAGE UND/ODER ÜBERWACHUNG DES FORTSCHREITENS EINES ZUSTANDS, EINER STÖRUNG ODER EINER KRANKHEIT

Title (fr)

SYSTÈME ET PROCÉDÉ CONFIGURÉS POUR ANALYSER LES PARAMÈTRES ACOUSTIQUES DE LA PAROLE AFIN DE DÉTECTER, DIAGNOSTIQUER, PRÉDIRE ET/OU SURVEILLER LA PROGRESSION D'UN ÉTAT, D'UN TROUBLE OU D'UNE MALADIE

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Application

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Abstract (en)

The present invention relates to a system and method configured for analysing acoustic parameters of speech to detect, diagnose, predict and/or monitor progression of a condition, disorder, or disease, and more particularly, any of paediatric and adult neurological and central nervous system conditions including but not limited to low back pain, multiple sclerosis, stroke, seizures, Alzheimer's disease, Parkinson's disease, dementia, motor neuron disease, muscular atrophy, acquired brain injury, cancers involving neurological deficits, paediatric developmental conditions and rare genetic disorders such as spinal muscular atrophy. The system and method extracts a first formant data set from words spoken by an individual and uses these to classify the vowels in the words on a first computing device, such as a mobile smart phone equipped with a microphone into which an individual speaks. The system stores at least some of these frequencies for the vowel formants in a second formant data set as a recorded file and provides the second formant data set as input to acoustic metrics to generate score data from which an assessment is made to determine the articulation level of the vowels in the words spoken by the individual, allowing for detection, diagnosis, prediction and/or monitoring progression of the condition, disorder, or disease.

IPC 8 full level

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- [X] CN 107610691 A 20180119 - UNIV SHENZHEN
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